

# BOSSPIPE

| Material-Constant   | Unit              | Orientation                               |              |
|---|-------------------|---|--------------|
|   |                   | Circumf.                                  | Longitudinal |
| All Values refer to structural laminate without liner                                   |                   |   |              |
| Density   | Kg/m <sup>3</sup> | 1800~2100                                 |              |
| Coeff. of linear thermal expansion  | 1/K               | 26~30 x 10 <sup>-6</sup>                  |              |
| Tensile E-Modulus at 23°C   | Mpa               | 10000~15000                               | 10000~12000  |
| Tensile strength  | Mpa               | 90~210                                    | 15~40        |
| Tensile strain at break: ≥PN 10   | %                 | 1.2~1.5                                   | 1.0~1.4      |
| <PN 10  |                   |   | ≥0.25        |
| Poissons ratio  | ---               | ~0.3                                      | ~0.25        |
| Compressive modulus at 23°C   | Mpa               | 9000~12000                                | 9000~12000   |
| Compressive strength  | Mpa               | 130~140                                   | 150~160      |
| Compressive strain at break   | %                 | 1.5~2.0                                   | 1.8!2.5      |
| Apparent flexural modulus   | Mpa               | 8000~15000                                | ---          |
| Flexural strength   | Mpa               | 120~140                                   | 50~60        |
| Flexural strain at break (extreme fiber)  | %                 | 1.6~2.2                                   | ---          |
| Circumferential strain at PN  | %                 | 0.1~0.25                                  | ---          |
| Circumferential strain at 1.5PN   | %                 | 0.25~0.4                                  | ---          |
| Temperature resistance  | °C                | ≥40°C (temperature up to 80°C on request) |              |
| Chemical resistance (PH Range)  | PH                | 1~11 (higher/lower PH values on request)  |              |
| Thermal Conductivity  | W/m/k             | 1.5~2.1                                   |              |
| <b>Note: Pipe designs for higher or lower jacking loads are available upon request.</b> |                   |   |              |